



## Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- 2 years warranty

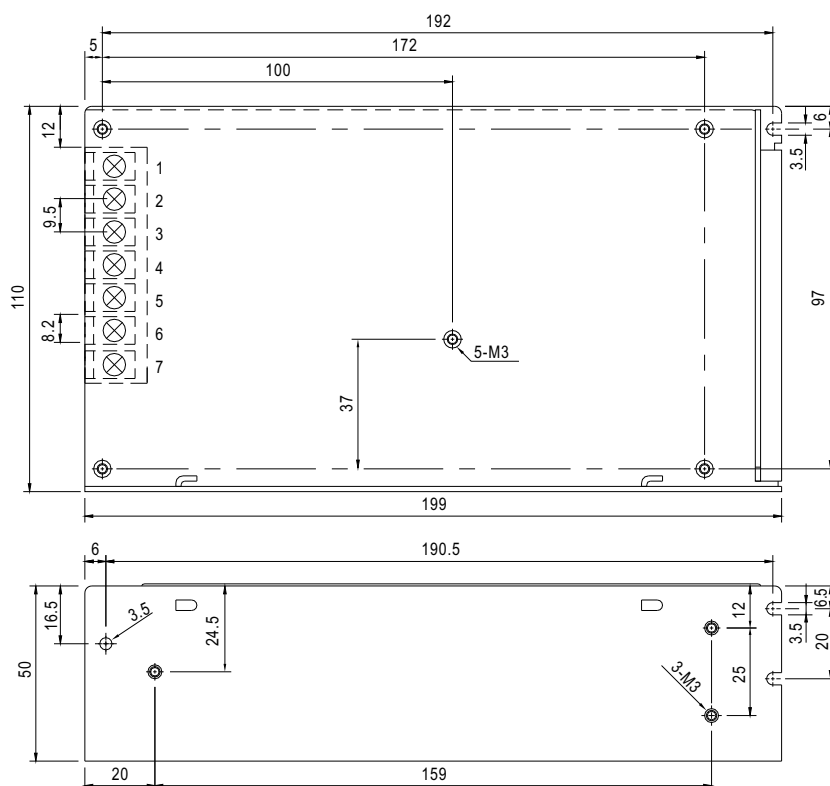


## SPECIFICATION

| MODEL               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | S-150-5                                                                                          | S-150-7.5     | S-150-9       | S-150-12     | S-150-13.5    | S-150-15      | S-150-24   | S-150-27      | S-150-48     |  |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------|---------------|--------------|---------------|---------------|------------|---------------|--------------|--|
| OUTPUT              | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5V                                                                                               | 7.5V          | 9V            | 12V          | 13.5V         | 15V           | 24V        | 27V           | 48V          |  |
|                     | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30A                                                                                              | 20A           | 16.7A         | 12.5A        | 11.2A         | 10A           | 6.5A       | 5.6A          | 3.2A         |  |
|                     | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0 ~ 30A                                                                                          | 0 ~ 20A       | 0 ~ 16.7A     | 0 ~ 12.5A    | 0 ~ 11.2A     | 0 ~ 10A       | 0 ~ 6.5A   | 0 ~ 5.6A      | 0 ~ 3.2A     |  |
|                     | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 150W                                                                                             | 150W          | 150.3W        | 150W         | 151.2W        | 150W          | 156W       | 151.2W        | 153.6W       |  |
|                     | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                               | 150mVp-p                                                                                         | 150mVp-p      | 180mVp-p      | 180mVp-p     | 180mVp-p      | 180mVp-p      | 240mVp-p   | 240mVp-p      | 240mVp-p     |  |
|                     | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.5 ~ 5.5V                                                                                       | 6 ~ 8.3V      | 8 ~ 10.4V     | 10.6 ~ 13.2V | 12 ~ 15V      | 13.5 ~ 16.5V  | 21 ~ 28V   | 24 ~ 30V      | 43 ~ 53V     |  |
|                     | VOLTAGE TOLERANCE <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                   | ± 2.0%                                                                                           | ± 1.0%        | ± 1.0%        | ± 1.0%       | ± 1.0%        | ± 1.0%        | ± 1.0%     | ± 1.0%        | ± 1.0%       |  |
|                     | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ± 0.5%                                                                                           | ± 0.5%        | ± 0.3%        | ± 0.3%       | ± 0.3%        | ± 0.3%        | ± 0.2%     | ± 0.2%        | ± 0.2%       |  |
|                     | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ± 0.5%                                                                                           | ± 0.5%        | ± 0.3%        | ± 0.3%       | ± 0.3%        | ± 0.3%        | ± 0.2%     | ± 0.2%        | ± 0.2%       |  |
|                     | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 100ms, 50ms at full load                                                                         |               |               |              |               |               |            |               |              |  |
| HOLD UP TIME (Typ.) | 28ms at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                  |               |               |              |               |               |            |               |              |  |
| INPUT               | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 88 ~ 132VAC/176 ~ 264VAC selected by switch      248 ~ 370VDC                                    |               |               |              |               |               |            |               |              |  |
|                     | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 47 ~ 63Hz                                                                                        |               |               |              |               |               |            |               |              |  |
|                     | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 78%                                                                                              | 80%           | 80%           | 82%          | 83%           | 84%           | 85%        | 86%           | 87%          |  |
|                     | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3.2A/115VAC      1.6A/230VAC                                                                     |               |               |              |               |               |            |               |              |  |
|                     | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                     | COLD START 35A                                                                                   |               |               |              |               |               |            |               |              |  |
|                     | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <3.5mA / 240VAC                                                                                  |               |               |              |               |               |            |               |              |  |
| PROTECTION          | OVERLOAD <small>Note.5</small>                                                                                                                                                                                                                                                                                                                                                                                                                                            | 105 ~ 150% rated output power<br>Protection type : Shut down o/p voltage, re-power on to recover |               |               |              |               |               |            |               |              |  |
|                     | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5.75 ~ 6.75V                                                                                     | 8.63 ~ 10.13V | 10.35 ~ 12.2V | 13.8 ~ 16.2V | 15.53 ~ 18.2V | 17.25 ~ 20.3V | 30 ~ 34.8V | 31.1 ~ 36.45V | 55.2 ~ 64.8V |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Protection type : Shut down o/p voltage, re-power on to recover                                  |               |               |              |               |               |            |               |              |  |
| ENVIRONMENT         | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -10 ~ +60℃ (Refer to output load derating curve)                                                 |               |               |              |               |               |            |               |              |  |
|                     | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20 ~ 90% RH non-condensing                                                                       |               |               |              |               |               |            |               |              |  |
|                     | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -20 ~ +85℃, 10 ~ 95% RH                                                                          |               |               |              |               |               |            |               |              |  |
|                     | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ±0.03%/℃ (0 ~ 50℃)                                                                               |               |               |              |               |               |            |               |              |  |
|                     | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                     |               |               |              |               |               |            |               |              |  |
| SAFETY              | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                          | UL1012, UL60950-1, TUV EN60950-1 approved                                                        |               |               |              |               |               |            |               |              |  |
|                     | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC                                                |               |               |              |               |               |            |               |              |  |
|                     | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                      | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                        |               |               |              |               |               |            |               |              |  |
| OTHERS              | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 286.7K hrs min.      MIL-HDBK-217F (25℃)                                                         |               |               |              |               |               |            |               |              |  |
|                     | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 199*110*50mm (L*W*H)                                                                             |               |               |              |               |               |            |               |              |  |
|                     | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.8Kg; 16pcs/13.8Kg/0.95CUFT                                                                     |               |               |              |               |               |            |               |              |  |
| NOTE                | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. If the power supply is short-circuited under no load, it will recover automatically when short-circuit is removed. |                                                                                                  |               |               |              |               |               |            |               |              |  |

## Mechanical Specification

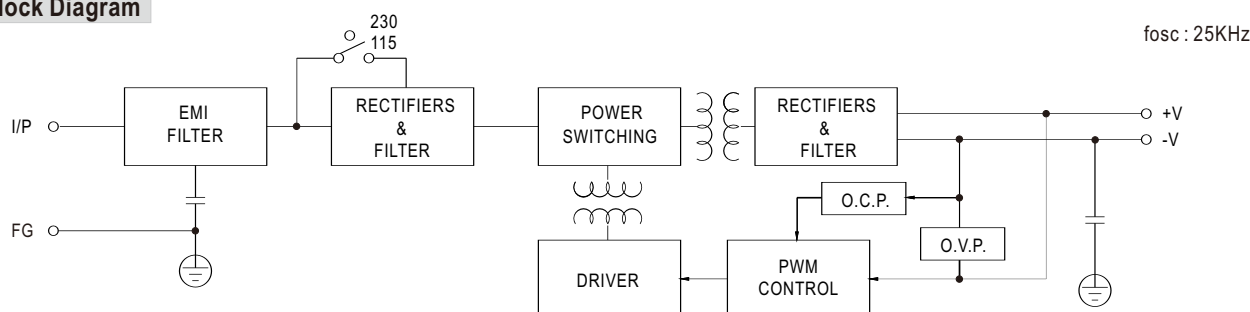
Case No. 906 Unit:mm



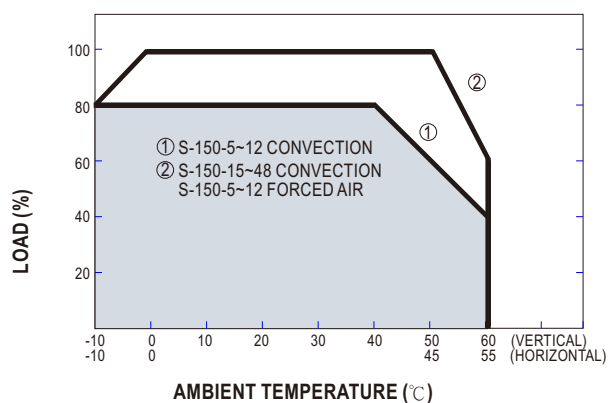
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4,5     | DC OUTPUT -V |
| 2       | AC/N       | 6,7     | DC OUTPUT +V |
| 3       | FG $\perp$ |         |              |

## Block Diagram



## Derating Curve



## Static Characteristics (24V)

